

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



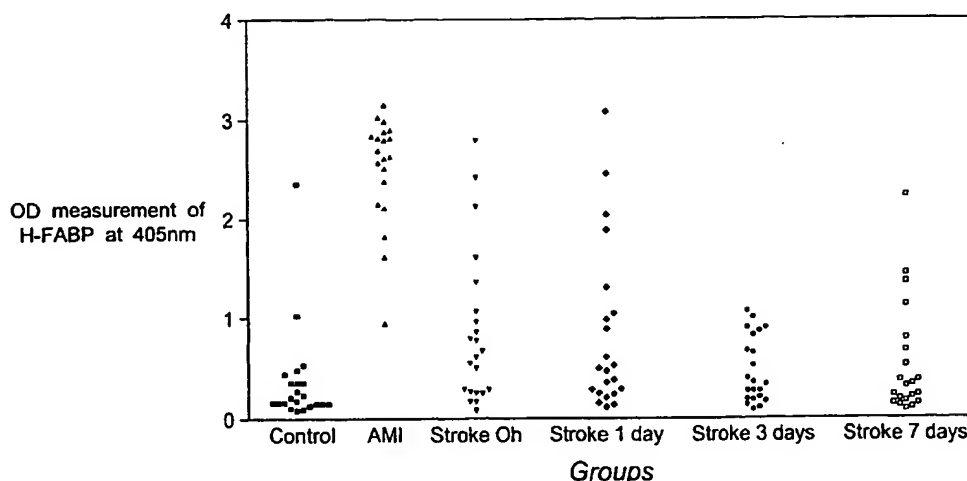
(43) International Publication Date
14 June 2001 (14.06.2001)

PCT

(10) International Publication Number
WO 01/42793 A3

- (51) International Patent Classification⁷: **G01N 33/68**
- (21) International Application Number: **PCT/EP00/12227**
- (22) International Filing Date: 4 December 2000 (04.12.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
9929140.3 10 December 1999 (10.12.1999) GB
- (71) Applicant (for all designated States except US): **UNIVERSITE DE GENEVE [CH/CH]**; Rue General-Dufour 24, Case Postale, CH-1211 Geneva 4 (CH).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **HOCHSTRASSER, Denis, Francois [CH/CH]**; Chemin de la Savonnière, Col-longe-Bellerive, CH-1245 Geneva (CH). **SANCHEZ, Jean-Charles [CH/CH]**; Chemin Frank-Thomas 42, CH-1208 Geneva (CH). **ZIMMERMANN, Catherine, Gabrielle [CH/CH]**; Rue Maunoir 48, CH-1207 Geneva (CH).
- (74) Agent: **LUCAS, Brian, Ronald**; Lucas & Co. 135 West-hall Road, Warlingham, Surrey CR6 9HJ (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
6 December 2001
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **DIAGNOSTIC ASSAY FOR STROKE**



(57) Abstract: Heart and brain fatty acid binding proteins (H-FABP, B-FABP) are markers for stroke. The invention provides a diagnostic assay for either of these markers, preferably by ELISA using an anti-H-FABP or B-FABP antibody. Since H-FABP is also a marker for acute myocardial infarction (AMI), to distinguish stroke from AMI requires an assay specific to AMI, e.g. using troponin-I or CK-MB as a marker, also to be carried out.

WO 01/42793 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 00/12227

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, BIOSIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98 45440 A (INCYTE PHARMACEUTICALS, INC.) 15 October 1998 (1998-10-15) page 28, line 23 -page 30, line 17 ---	1,7,8
A	VAN NIEUWENHOVEN, FA, ET AL.: "Discrimination Between Myocardial and Skeletal Muscle Injury by Assessment of the Plasma Ratio of Myoglobin Over Fatty Acid-Binding Protein" CIRCULATION, vol. 92, no. 10, 15 November 1995 (1995-11-15), pages 2848-2854, XP001004751 the whole document ---	1-6
A	US 5 710 008 A (JACKOWSKI, W) 20 January 1998 (1998-01-20) claims 23-34 ---	1-3
	--- -/-	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

6 June 2001

Date of mailing of the international search report

28/06/2001

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Gunster, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 00/12227

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GORSKI, J, ET AL.: "Increased fatty acid-binding protein concentration in plasma of patients with chronic renal failure"</p> <p>CLINICAL CHEMISTRY, vol. 43, no. 1, January 1997 (1997-01), pages 193-195, XP002168295 the whole document</p> <p>---</p>	1-8
A	<p>TAKAHASHI, M, ET AL.: "Rapid and Sensitive Immunoassay for the Measurement of Serum S100B Using Isoform-specific Monoclonal Antibody"</p> <p>CLINICAL CHEMISTRY, vol. 45, no. 8, 1999, pages 1307-1311, XP002167762 cited in the application the whole document</p> <p>---</p>	1-8
A	<p>SHIMIZU, F, ET AL.: "Isolation and Expression of a cDNA for Human Brain Fatty Acid-Binding Protein (B-FABP)"</p> <p>BIOCHIMICA ET BIOPHYSICA ACTA, vol. 1354, no. 1, 1 July 1997 (1997-07-01), pages 24-28, XP001004647 cited in the application abstract</p> <p>-----</p>	1-8

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 00/12227

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9845440 A	15-10-1998	AU 6894298 A	30-10-1998
US 5710008 A	20-01-1998	CA 2027434 A	13-04-1992
		US 5604105 A	18-02-1997
		AU 654672 B	17-11-1994
		AU 8475791 A	16-04-1992
		BE 1004994 A	16-03-1993
		BR 9104431 A	09-06-1992
		CN 1060533 A, B	22-04-1992
		DE 4122886 A	16-04-1992
		ES 2070658 A	01-06-1995
		FR 2667944 A	17-04-1992
		GB 2248688 A, B	15-04-1992
		IT 1251682 B	19-05-1995
		JP 2628421 B	09-07-1997
		JP 4258765 A	14-09-1992
		KR 167564 B	30-03-1999
		MX 9101550 A	08-07-1992
		NZ 239938 A	25-03-1994
		US 5290678 A	01-03-1994
		US 5747274 A	05-05-1998
		US 5744358 A	28-04-1998
		AU 5117996 A	30-10-1996
		CA 2215018 A	17-10-1996
		EP 0826151 A	04-03-1998
		WO 9632648 A	17-10-1996
		JP 10511185 T	27-10-1998
		NO 974682 A	10-12-1997
		AU 4553993 A	13-02-1995
		WO 9502612 A	26-01-1995
		EP 0710252 A	08-05-1996
		ZA 9404547 A	17-02-1995